Biomedical Application of Carbon Nanotubes

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Recent dramatic progress of *nanotechnology* and *biological science* allows us to combine soft materials (e.g. biomolecules, etc.) with solidnanostructures (e.g. nanoparticles, carbon nanotubes, nano-circuits, etc.) to build a generation of new devices for various biomedical applications. However, a major stumbling block holding back their commercial applications has been the extermely high manufacturing cost of such devices.One promising solution for this problem is the *surface-templated assembly process*, where "self assembly strategy" is adapted to assemble large-scale integrated devices. In this presentation, I will discuss about how this method can be applied to the mass-production of CNT-based biosensors and other hybrid devices. Future implications and prospects of CNT-based biosensors also will be discussed.